Chapter 7
Valuation Using the Sales Comparison and Cost Approaches

Decision Making in Commercial Real Estate Centers Around Valuation

- Valuation calculations are required when a:
  - property acquisition is contemplated
  - structure is
    - modernized
    - renovated
    - abandoned
    - demolished
  - site is developed
  - property is used as collateral for a loan

Value Concepts

- **Market value:**
  - Most probable selling price, assuming “normal” sale conditions.
  - Value for the “typical” market participant.

- **Investment value:**
  - Value to a particular individual (investor).

- **Transaction price:**
  - Price actually paid for a specific property.

Who Uses Market Value Appraisals?

- Buyers
- Sellers
- Corporate acquisitions, mergers or dissolutions
- Courts
  - Divorces
  - Eminent domain cases
  - Settlement of estates
  - Bankruptcy
- Mortgage Lenders

Why Do We Have To Estimate Market Value?

- In markets with perfect competition & investment value revelation, all transactions take place at true market value
- In such markets, no need for buyers & sellers to search for “true” market value of an asset;
  - it is continuously revealed by transaction prices of perfect substitutes.
  - Simon Property Group (SPG) example in book.....

- Moreover, the heterogeneous investment motivations of buyers & sellers & their negotiation abilities have no role in the price formation process
  - We are all price takers!
What About Real Estate Markets?

- Every property is unique
  - Unique location
  - Many & varied attributes
- These heterogeneous assets trade in illiquid, highly segmented & informationally inefficient local markets
- Search costs associated with matching buyers & sellers are significant

Implications?

- Even the few transactions of comparable properties that we do observe may not be indicative of the value of the “subject” property
- Thus…..we need an army of “fee appraisers” to estimate the market value of real estate assets

Uniform Standards of Appraisal Practice (USPAP)

- In 1987, nine leading appraisal groups jointly put forth uniform appraisal standards
- Maintained by the Appraisal Foundation, the Uniform Standards of Professional Appraisal Practice (USPAP) are required & followed by all states and federal regulatory agencies
- To comply with USPAP, appraisers must follow the following framework or process...

Uniform Standards of Appraisal Practice (USPAP)

1. Identify the appraisal problem
   - Client & intended uses of appraisal
   - Intended use of appraisal
   - Date of valuation
   - Purpose of assignment (market, insurance, or taxable value)
   - Date of valuation
   - Important assumptions or conditions

Uniform Standards of Appraisal Practice (USPAP)

2. Determine the required scope of work
   - Time & personal requirements
   - Outline of proposed appraisal report
   - Data & procedures used to complete required tasks

Uniform Standards of Appraisal Practice (USPAP)

3. Collect data and describe property
   - Market area data
     - Characteristics of region, city, and neighborhood
   - Subject property data
     - Site, building, & locational characteristics
   - Comparable property data
USPAP (continued)
4. Perform data analysis
   – Market analysis
     • Demand, supply, and marketability studies
   – Highest & best use:
     • as though vacant; considers any possible use
     • as improved; must consider any cost of demolition

USPAP (continued)
5. Determine value of land
   – Important to value separately from improvements

USPAP (continued)
6. Apply 3 approaches to valuation
   – Sales comparison approach
   – Cost approach
   – Income approach
7. Reconcile indicated values from 3 approaches
   – Weight based on relative reliability of the three approaches

USPAP (continued)
8. Report final value estimate
   – Report writing is an extremely important function
   – Must meet requirements of 1 of 3 reporting options
     • Self-contained report
       – Contains full detail and information. Usually takes a full narrative approach
     • Summary report
       – Majority of data and analysis kept in appraiser’s work file
     • Restricted report
       – Provides minimal info & discussion
       – Client does not intend to provide appraisal to anyone else

Three Approaches to Estimating Market Value
• Sales comparison approach
• Cost approach
• Income approach

Sales Comparison Approach
• Basic Idea:
  – Value of RE can be determined by analyzing the sale prices of similar properties
• Why?
  – Because in a competitive market close substitutes should sell for similar prices
Sales Comparison Appraisal Approach

- Identify elements of comparison & value adjustment
- Select comparable sales
- Adjust comparable sale prices to approximate subject
- Reconcile adjusted sale prices; obtain indicated value of subject

Identify Elements of Comparability
- Same subdivision?
- Same price range?
- Same size?
- Same style?
- Same vintage?
- Other?

Selecting Comparables
- Must be properties that prospective buyers would consider substitutes
- Should be arms-length transactions
  - Fairly negotiated prices that occurred under “normal” conditions
    - For example, not a distressed sale
  - Select to minimize required physical and locational adjustments

Selecting Comparables
- Data sources:
  - Public records (e.g., county property tax assessor)
  - Multiple listing service
  - Private vendors (title companies, others)
  - Others?
  - Importance of personal relationships

Adjustments to Comparable Sale Prices
- Goal?
  - Convert characteristics of each comparable to an approximation of subject.
  - Why not adjust the characteristics of the subject?
- Sequence of adjustments
  - Transactional adjustments
  - Property adjustments

Adjustments to Comparable Sales Prices
- Transactional Adjustments
  - Property rights conveyed
  - Financing terms
  - Conditions of sale (arm’s length or not?)
  - Expenditures made immediately after purchase
  - Market conditions
Adjustment to Comparable Sales Prices

- Property Adjustments
  - Location
  - Physical characteristics
  - Economic characteristics
  - Use
  - Non-realty items (personal property)

Example of Sales Comparison Approach

- You are appraising a property located adjacent to a high speed freeway
- Improvements consist of a one-story frame dwelling with 8 rooms and 2 baths in a total area of 2,000 sq. ft.
- Of average quality construction, home was in good condition at time of inspection
- Floor plan & items of equipment are typical for this class of property

Info on 4 Comparables

1. One year ago a 2,400 sq. ft. property not adjacent to freeway sold for $160,000. Improvements were nearly identical to subject dwelling in all but size.
2. This year a 2,400 sq. ft. property not adjacent to freeway sold for $150,500. This dwelling was highly similar to subject in all respects except for size.
3. A 2,000 sq. ft. property not adjacent to the freeway sold 1 year ago for $150,000. These improvements are highly similar to subject.
4. A 2,400 sq. ft. property sold this year for $140,300. Located adjacent to the freeway, it was very similar to subject except for size.

Example (continued)

- Problem:
  Develop an indication of the value of the subject, showing the source of each adjustment.
- Indicated adjustments are for:
  - time
  - location relative to freeway
  - size
Adjustment Factors

• **Time:**
  - Sale 1 (1 year ago) $160,000
  - Sale 2 (current) 150,500
  - Difference $-9,500

• **Location:**
  - Sale 2 (not adjacent to freeway) $150,500
  - Sale 4 (adjacent to freeway) 140,300
  - Difference $-10,200

• **Size:**
  - Sale 1 (2,400 sq. ft.) $160,000
  - Sale 3 (2,000 sq. ft.) 150,000
  - Difference $-10,000

---

Example (continued)

<table>
<thead>
<tr>
<th>Adjustments</th>
<th>Sale</th>
<th>Sale Price</th>
<th>Time</th>
<th>Location</th>
<th>Sale</th>
<th>Total</th>
<th>Adjusted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>160,000</td>
<td>$160,000</td>
<td>-9,500</td>
<td>Sale 1</td>
<td>150,500</td>
<td>150,500</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>160,000</td>
<td>150,500</td>
<td>-10,200</td>
<td>Sale 2</td>
<td>140,300</td>
<td>140,300</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>150,500</td>
<td>140,300</td>
<td>-19,700</td>
<td>Sale 4</td>
<td>130,300</td>
<td>130,300</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>140,300</td>
<td>130,300</td>
<td>-20,200</td>
<td>Sale 3</td>
<td>120,100</td>
<td>120,100</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Market Value: $130,300

Note: Adjustments can be positive or negative. They are all negative here because subject property is inferior to the comparables in all ways that matter to the market.

---

In the Real World...

• In "real life" situations, indicated values never line up identically as in above example

• How many attributes of the homes should appraiser attempt to price?
  - Take a look at Exhibits 7-8 & 7-12

---

Adjusting for Market Conditions Using a Price Index

• **Sources of Price indexes**
  - Freddie Mac [Freddie Mac: CMHPI Data](http://www.fhfa.gov)
  - Federal Housing Finance Agency (FHFA) [http://www.fhfa.gov](http://www.fhfa.gov)
  - National Association of Realtors [www.realtor.org/research/research/metroprice](http://www.realtor.org/research/research/metroprice)

• Application: Derive monthly rates of change from most relevant series, & apply to comparables.
Cost Approach

- Procedure
  - Estimated reproduction cost of improvements
    - Estimated accrued depreciation
    = Depreciated cost of building improvements
  - Estimated value of site
    = Indicated value by the cost approach

Major Assumption:
The cost of creating a good equals its value

Cost Approach (continued)

- Methods to estimate replacement cost
  - Quantity survey method
  - Cost per square foot or cubic foot
  - Unit in place

- Sources
  - R.S. Means [www.rsmeans.com](http://www.rsmeans.com)
  - Marshall and Swift [www.marshallswift.com](http://www.marshallswift.com)

Accrued Depreciation

- Not tax depreciation
- Difference between replacement cost & market value of improvements
- Types of accrued depreciation that must be considered:
  1. Physical deterioration
  2. Functional obsolescence
  3. External (economic) obsolescence
Types of Accrued Depreciation (continued)

1. Physical deterioration:
   - Loss in market value due to aging, decay & ordinary use
2. Functional obsolescence:
   - Loss in value due to changes in tastes, preferences, technological innovations, or market standards
   - Examples?

3. External (economic) obsolescence:
   - Loss in value due to changes beyond property boundaries (neighborhood effects)
     - Increased traffic congestion in area
     - Conversion of residential neighborhood from owner-occupied to rental
     - Environmental issues
     - Decline in desirability/demand from neighborhood

Appraisal Assignments Where Cost Approach is Heavily Weighted?

1. New buildings
2. Insurance appraisals
3. Specialty buildings

Uniform Residential Appraisal Report
Revolution in Comparable Sales Appraisal: Automated Valuation Systems (AVMs)

- Example: Freddie Mac: Home Value Suite
- Based on model developed over millions of sales
- Combines complex regression with repeat sales and other statistical techniques
- Regression is used to predict/value the subject property
- See INDUSTRY ISSUES 7-2 and EXPLORE THE WEB on page 187

Use One of These AVMs to Value a Relatives' Home

- http://www.smarthomebuy.com
- http://zillow.com

End of Chapter 7